

**IMPLANTABLE NEUROSTIMULATOR PROGRAMMING WITH BATTERY
LONGEVITY INDICATION**

ABSTRACT

A programming device used to program an implantable neurostimulator (INS) presents battery longevity information to a user to assist the user in selecting a program for the INS. The programming device directs the INS to deliver neurostimulation therapy according to a plurality of programs during a programming session. Each of the programs includes parameters that define the neurostimulation delivered according to that program. For example, each program may include as parameters a voltage or current pulse amplitude, a pulse width, a pulse rate, and a duty cycle. The program may also identify as parameters the electrodes selected from a set coupled to the INS and their polarities, e.g., anode or cathode, for delivery of neurostimulation according to that program. The programming device estimates battery drain rates for each of the programs tested during the programming session based on the parameters for that program, and presents battery longevity information to a user based on the estimated battery drain rates.